Calendar No. 512

100TH CONGRESS
1st Session

SENATE

REPORT
100-269

ADDITIONAL LANDS TO THE KILAUEA POINT WILDLIFE REFUGE, KAUAI, HAWAII

DECEMBER 21 (legislative day, DECEMBER 15), 1987.—Ordered to be printed

Mr. BURDICK, from the Committee on Environment and Public Works, submitted the following

REPORT

[To accompany S. 1193]

The Committee on Environment and Public Works, to which was referred the bill (S. 1193) to add additional lands to the Kilauea Point Wildlife Refuge on Kauai, Hawaii, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

GENERAL STATEMENT

This legislation authorizes appropriation of $4 million to the U.S. Fish and Wildlife Service to acquire two tracts of land adjacent to the Kilauea Point National Wildlife Refuge on the island of Kauai, Hawaii.

PURPOSE AND BACKGROUND

Background on Kilauea Point National Wildlife Refuge

Kilauea Point National Wildlife Refuge is located on the north shore of the Island of Kauai, on a 31-acre site formerly occupied by the United States Coast Guard. A lighthouse was built there in the early 1900's. In 1974, the U.S. Fish and Wildlife Service leased vacant Coast Guard facilities at Kilauea Point for use in the monitoring and administration of Hanalei and Huleia National Wildlife Refuges. The Coast Guard vacated Kilauea Point entirely in 1980, but continued to lease its facilities to the Fish and Wildlife Service until 1985, when the property was transferred to the Service. The old lighthouse since has been designated a National Historic Landmark.

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Kilauea Point National Wildlife Refuge provides nesting habitat for several species of Hawaiian sea birds. Wildlife is abundant on the adjacent lands at Crater Hill and Mokolea Point. Dolphins, humpback whales and green sea turtles (a species listed as threatened under the Endangered Species Act) inhabit the surrounding coastal waters.

The refuge also is a popular attraction for tourists. The number of visitors nearly doubled after the U.S. Fish and Wildlife Service made improvements in 1974 aimed at enhancing observation and photography of the wildlife. When the Service assumed control of the site in 1980, one of the former Coast Guard buildings was converted to a simple visitor center, a small parking lot was constructed, interpretive displays were installed, and a visitor access trail was built. Now more than 250,000 visitors come to the refuge each year to enjoy its wildlife, the historic Coast Guard lighthouse, and the spectacular vistas.

The increasing number of visitors and the rapidly increasing development of the land surrounding the refuge, are placing great pressure on the ability of the Fish and Wildlife Service to protect the refuge and its resources. The habitat of the sea birds has been invaded by free-running dogs and other feral animals because of the lack of adequate fencing.

The acquisition of the two adjacent parcels of land—Crater Hill and Mokolea Point—and the construction of fences and visitor trails, where appropriate, will enable the U.S. Fish and Wildlife Service to provide better protection for the sea birds and, at the same time, enhance the experience of visitors to the refuge.

SECTION-BY-SECTION ANALYSIS

Section 1. Additional lands

Section 1 of S. 1193 authorizes the acquisition of two tracts of land, Crater Hill (101.1 acres) and Mokolea Point (37.6 acres), for addition to Kilauea Point National Wildlife Refuge.

Addition of Crater Hill and Mokolea Point to Kilauea Point National Wildlife Refuge will protect the largest and nearly the last nesting sites for Pacific sea birds in the major islands of the Hawaiian Chain. Moreover, these acquisitions will provide a unique opportunity for the public to see the courting and nesting behavior of these sea birds.

Section 2. Construction of access foot path

This section of the bill requires the Secretary of the Interior to carry out additional measures to provide protection for the wildlife of Kilauea Point National Refuge, as expanded by this bill, and to provide public access to these lands. The Secretary is directed to construct and maintain a fence and access foot trails through the lands acquired under this bill. The access foot trails must be constructed in a manner consistent with the preservation of the refuge's wild and scenic beauty. These steps will protect sea birds from dogs and other predators and will enhance the experience of those visiting the refuge.

Section 3. Authorization of funding

This section authorizes $4 million to be appropriated to the Secretary of the Interior for the acquisition of Crater Hill and Mokolea Point and for the construction of access foot trails in these lands.

The Secretary should move expeditiously to request the funding authorized by this bill, to acquire these two parcels of land, and to construct the needed fence and access foot trails. Negotiations to obtain Crater Hill and Mokolea Point have been going on for at least two years. To date, however, these negotiations have not resulted in these areas being protected by U.S. Fish and Wildlife Service ownership. Rapidly rising real estate values will make acquisition increasingly difficult. Moreover, in 1973 Mokolea Point was zoned entirely for conservation purposes. Subsequent land use decisions have decreased the amount of land zoned for such purposes to 20 acres. Further delay in acquiring these lands, therefore, may jeopardize their scenic and wildlife value.

HEARINGS

The Subcommittee on Environmental Protection of the Committee on Environment and Public Works held a hearing in Washington, D.C., on September 10, 1987.

Testimony was received from representatives of the U.S. Fish and Wildlife Service and Senator Matsunaga. Written testimony was received from the Crater Hill Coalition in behalf of numerous institutions, organizations and individuals.

ROLLCALL VOTES

Section 7(b) of rule XXVI of the Standing Rules of the Senate and the rules of the Committee on Environment and Public Works require that any rollcall votes taken during consideration of this bill be announced in this report.

The bill was ordered reported on November 10, 1987, by unanimous voice vote.

REGULATORY IMPACT

Section 11(b) of rule XXVI of the Standing Rules of the Senate require the Committee to evaluate the regulatory impact of the reported bill.

It is not anticipated that this bill will impose any significant new regulatory burden.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires each report to contain a statement of the cost of the reported bill prepared by the Congressional Budget Office. That statement follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, December 3, 1987.

Hon. QUENTIN N. BURDICK,
Chairman, Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has reviewed S. 1193, a bill to add additional lands to the Kilauea Point Wildlife Refuge on Kauai, Hawaii, as ordered reported by the Senate Committee on Environment and Public Works, November 10, 1987. We estimate that the enactment of this bill would result in additional federal outlays of about $1.5 million in fiscal year 1988, assuming appropriation of the necessary sums. Additional expenditures are expected to be about $150,000 in 1989 and $50,000 a year thereafter.

S. 1193 would authorize the Secretary of the Interior to acquire approximately 139 acres adjacent to the Kilauea Point Wildlife Refuge. Once the addition to the refuge is completed, the bill would require the Secretary to construct and maintain a system of trails and fences through the new acreage. The bill would authorize the appropriation of $4 million for land acquisition and construction.

According to the U.S. Fish and Wildlife Service (USFWS), most of the new acreage is expected to be donated to the federal government, leaving a 38-acre tract to be purchased for about $1.5 million. Upon acquisition of both parcels, the USFWS would need about $100,000 for the required construction. Resource management costs would be about $50,000 a year for ongoing maintenance of the addition.

Enactment of this bill would not affect the budgets of state or local governments.

If you wish further details on this estimate, we will be pleased to provide them.

With best wishes,
Sincerely,

JAMES BLUM,
(For Edward M. Gramlich, Acting Director).

CHANGES IN EXISTING LAW

In the opinion of the Committee, it is necessary to dispense with the requirements of section 12 of rule XXVI of the Standing Rules of the Senate in order to expedite the business of the Senate.

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Calendar No. 513

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PLASTIC POLLUTION CONTROL ACT OF 1987

DECEMBER 21 (legislative day, DECEMBER 15), 1987.—Ordered to be printed

Mr. BURDICK, from the Committee on Environment and Public Works, submitted the following

REPORT

[To accompany S. 1986]

The Committee on Environment and Public Works reports an original bill (S. 1986) to study, control, and reduce the pollution of aquatic environments from plastic materials, and for other purposes, and recommends that the bill do pass.

GENERAL STATEMENT

This legislation implements Annex V to the International Convention for the Prevention of Pollution from Ships (MARPOL), which prohibits the disposal of plastic waste from ships. In addition, to reduce further the environmental and economic damage caused by plastic debris the bill requires the Administrator of the Environmental Protection Agency (1) to conduct a study to determine and control the adverse effects on the environment that result from improper disposal of plastic articles and to evaluate the relative impact of plastics on the solid waste stream and the desirability and methods of reducing this impact; (2) to conduct a public awareness program with other Federal agencies, which consists of public outreach, public service announcements, and "Citizen Pollution Patrols"; (3) to prohibit non-degradable plastic ring carriers within 36 months of the date of the bill's enactment unless such a prohibition is not feasible; and (4) to develop a plan for the restoration of the New York Bight.

Definition of the Term "Plastic"

As used in this bill, the term "plastic(s)" is interpreted to mean a material that contains as an essential ingredient one or more organic polymeric substances of large molecular weight, is solid in its

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finished state, and, at some stage in the manufacture or processing into finished articles, can be shaped by flow. This definition is the one accepted by the American Society for Testing and Materials. Plastics are used for a variety of purposes including, but not limited to, packaging (vapor-proof barriers, bottles containers, liners), ship construction (fiberglass and laminated structures, siding, piping, and electrical and electronic components), disposable eating utensils and cups, bags, sheeting, floats, fishing nets, strapping bands, rope and line.

Annex V to the International Convention for the Prevention of Pollution from Ships

Annex V to the International Convention for the Prevention of Pollution from Ships (MARPOL) will prohibit the disposal (by the vessels of its signatories) of plastic waste anywhere in the ocean and will prohibit the disposal of all other garbage—including food wastes, glass, and metal—within 12 miles of land. Non-plastic garbage that is ground up may be dumped outside of three miles from land. Annex V will enter into force one year after nations representing 50 percent of the world's shipping tonnage have ratified it and deposited the instruments of ratification with the International Maritime Organization. The United States recently ratified the Annex. Once it deposits the instruments of ratification with the International Maritime Organization, the necessary actions will have been taken by nations with the sufficient percentage of the world's shipping tonnage.

Purpose and Background

PLASTIC DEBRIS

Concern has been growing over the past decade among scientists, environmentalists, fishermen, boaters, residents of coastal communities, and others about the increasing volume of plastic debris in the aquatic environment. Unlike other debris, virtually all plastic articles currently being manufactured degrade extremely slowly and may persist nearly intact for decades or centuries. Improper disposal of non-degradable plastic articles, therefore, is a cumulative pollution problem.

Some plastic debris in the aquatic environment comes from sources on land. It may be discharged from sewage treatment plants combined with storm run-off systems in times of heavy rainfall, or it may be carried by wind from landfills. However, it is believed generally that most plastic debris in the maritime environment comes from ocean sources. Disposal of plastic waste and other garbage at sea is a normal operating procedure for a majority of commercial and military vessels. The amount of plastic debris generated worldwide by ocean sources is believed to exceed 6.4 million metric tons per year.

Plastic materials are known to adversely affect aquatic life and shoreline communities. The Center for Environmental Education recently concluded a study *(Plastics in the Ocean: More than a Litter Problem,* February 1987) for the Environmental Protection Agency which reviewed existing literature and other information

related to the problems caused by plastic debris. The investigators concluded that

> [e]vidence is emerging that the disposal of plastic debris in the marine environment is a serious problem for a number of species and for communities and user groups that depend on the marine environment.

Adverse environmental effects result from entanglement of aquatic animals in plastic debris and from the ingestion of plastic debris by these organisms. It is estimated that thousands of animals, including sea birds, marine mammals and sea turtles, die each year from ingestion of or entanglement in this plastic debris. Evidence suggests, for example, that the northern fur seal population of the Pribiloff Islands in Alaska are declining at an annual rate of 4 to 8 percent per year due to mortality from entanglement in plastic debris. Mortality to species of threatened and endangered sea turtles is known to occur from ingestion of plastic bags and sheeting. Raw plastic pellets are known to have been ingested by over 50 species of sea birds.

Adverse economic effects of plastic debris result from depletion of fishery resources, vessel damage, and aesthetic degradation with concomitant loss of tourism revenues and costly clean-up efforts. Plastic waste discarded from ships and from land-based sources washes ashore and despoils beaches. Coastal communities in New England, New Jersey and other areas of the New York Bight, Texas, Alaska and Hawaii all have reported significant litter problems from plastic debris.

There are no provisions in statutes and regulations or international agreements, prior to Annex V to the Convention, devoted specifically to prohibiting disposal of plastics in aquatic environments. Existing prohibitions on waste disposal in our oceans and other waters have either not addressed the problem adequately or have been difficult to enforce. Because of these problems and the lack of public education, effective means to control the use and disposal of plastic articles have yet to be implemented. This bill is intended to fill that void.

DEVELOPMENT OF THE LEGISLATION

The Plastic Pollution Contol Act of 1987 was developed from three bills pending in the Committee (S. 559, S. 560, and S. 633).

S. 559 would have required the Administrator of the Environmental Protection Agency to conduct a study to determine the means available to control adverse effects on fisheries, wildlife, and the environment generally that result from the disposal of plastic within the United States and in the oceans. The Administrator would have been required to make recommendations to the Congress within 18 months of enactment as to what administrative and legislative actions might be taken to eliminate such adverse effects. The bill also would have directed the Administrator, within 18 months of enactment, to require, by means of regulation, that certain beverage or other container holders (plastic ring carriers) be made of "naturally degradable material."

S. 560, as amended on August 3, 1987 (Amendment No. 656), would have incorporated provisions in the Act to Prevent Pollution

from Ships (APPS) to implement Annex V to MARPOL. The APPS currently implements Annexes I and II of MARPOL concerning oil and noxious liquid substances.

Under S. 560, the APPS would have applied implementation of Annex V (as well as elements of MARPOL currently in force for the United States) to all U.S. ships wherever they are located, and to foreign ships while they are located in the navigable waters of the United States. Ships of countries not parties to Annex V would have been subjected to the Annex's standards while they are within the navigable waters and Exclusive Economic Zone (i.e. within 200 miles of land). Enforcement with respect to ships of countries that are parties to Annex V outside of the U.S. navigable waters would have been by those countries. Public vessels (e.g. Navy vessels) would have remained exempted from Annex V requirements. Reception facilities for garbage at those ports and terminals specified by regulation would have been required to be provided by persons in charge of those ports and terminals.

S. 633 would have made it unlawful to dispose of plastic products into waters of the United States and the territorial sea, and extending seaward 200 nautical miles. Disposal of such products in areas where they are likely to be carried into such waters also would have been prohibited. Exceptions were provided for disposal from ships which is necessary for safety or which is accidental, provided that all "reasonable precautions have been taken to prevent such loss." The bill would have imposed criminal and civil penalties for violations of the prohibitions on disposal of plastic products and authorized citizen suits against alleged violators or U.S. agencies.

S. 633 also would have required the Administrator of the Environmental Protection Agency to conduct a study to determine methods to reduce or eliminate plastics disposal in waters of U.S. jurisdiction. The Administrator would have been required to make recommendations to the Congress within 6 months of enactment as to what administrative and legislative actions might be taken to eliminate or significantly reduce plastic pollution of our waters. A public awareness program would have been required to be initiated within 3 months of enactment by the Administrator, the Administrator of the National Oceanic and Atmospheric Administration, and the Secretary of the Interior.

Title II of S. 633 would have established a free-standing provision to implement Annex V to the Convention. The prohibitions of Annex V would have applied to waters of the United States, the territorial sea, and would have extended seaward 200 nautical miles. The criminal and civil penalties of title I of the bill would have applied to Annex V violations.

Section-by-Section Analysis

SECTION 1. SHORT TITLE

This section provides the short title, "Plastic Pollution Control Act of 1987".

SECTION 2. PURPOSES

This section of the bill states that the purpose of the Act is to implement Annex V to the International Convention for the Prevention of Pollution from Ships (MARPOL) and to identify and reduce the effects of plastic pollution on the aquatic environment. Annex V contains provisions prohibiting the disposal of plastics from ships anywhere at sea and the disposal of various other types of garbage from ships at specified distances from shore.

SECTION 3. EFFECTIVE DATE

This section provides that the effective date of the Act will be the date that Annex V enters into force for the United States, except that sections 3, 108, 111, 201, 203, 204, 302, 401, and 402 will come into force on the date of enactment. These sections (1) require the Secretary of Transportation to seek international agreements to enhance the enforceability of Annex V; (2) establish civil penalties for the Refuse Act; (3) require reports to the Congress on compliance with Annex V; (4) require study of methods to reduce plastics pollution; (5) establish a program to increase public awareness; (6) regulate plastic ring carriers; and (7) develop a plan for the restoration of the New York Bight.

TITLE I—AMENDMENTS TO THE ACT TO PREVENT POLLUTION FROM SHIPS

SECTION 101. DEFINITIONS

This section amends section 2 of the Act to Prevent Pollution from Ships (APPS) which contains definitions. First, it makes a technical amendment to the definition of term "MARPOL Protocol." Second, it amends the definition of the term "Convention" by adding Annex V and any modifications made to the Convention, Protocols, or Annexes which have entered into force for the United States. These two amendments clarify the distinction between the two terms as they are used in the APPS. Third, it adds the term "garbage" to the terms whose meanings under the Convention are incorporated into the APPS by reference. Fourth, it provides that the term "sea" as used in Annex V includes the navigable waters of the United States. The effect of this change is to extend the coverage of Annex V to the inland waters of the United States. The definition of the term "navigable waters" for the purposes of this section may be found in 33 CFR 2.05–25.

SECTION 102. APPLICATION OF THE ACT

This section amends section 3 of the APPS, which sets out the ships, ports, and terminals to which the APPS applies. It provides that the entire statute applies to U.S. vessels everywhere. It further provides that the requirements of Annex V apply to all other (i.e. foreign) ships while in the navigable waters and the exclusive economic zone of the United States. It also provides that the APPS applies to all ports or terminals in the United States.

Section 3(a) of the APPS currently provides that public vessels of the United States are exempt from its provisions. Section 102 of this bill modifies that exemption as follows. The bill requires U.S.

public vessels to comply with Annex V within 5 years, except that (1) during wartime or national emergencies, public vessels need only comply as best they can at the time; and (2) if 5 years appears to be too short a time, the responsible Federal agency must report to the Congress an alternative schedule for compliance within 3 years of enactment, at which time the Congress shall modify the 5-year requirement as appropriate under section 202(c) of the Plastic Pollution Control Act.

Although U.S. Navy ships account for only about 0.2 percent of the plastic waste generated by vessels worldwide, the crew members on board these ships still generate approximately 28,000 pounds of plastic waste each day which is dumped routinely at sea. Therefore, U.S. Navy vessels and other U.S. public ships should comply with the prohibitions of Annex V as quickly as possible. The Coast Guard already prohibits its ships from dumping plastic waste at sea. Clearly, there are some Navy vessels and naval operations where compliance is already possible.

Finally, this section amends section 3 of the APPS to require the Secretary of Transportation to promulgate regulations giving effect to the provisions of Annex V for vessels of nations that are not party to Annex V.

SECTION 103. POLLUTION RECEPTION FACILITIES

This section amends section 6 of APPS, which currently requires the Secretary of Transportation to promulgate regulations to set standards for reception facilities at ports and terminals for residues and mixtures of oil and noxious liquid substances.

This section adds a new requirement that the Secretary promulgate regulations setting criteria for determining the adequacy of reception facilities for garbage at ports and terminals and specifying which ports and terminals shall be required to either provide the reception facility or ensure that a third party provides the reception facility required by the Secretary. This section also authorizes the Secretary to issue a certificate to ports and terminals that have adequate garbage reception facilities, to revoke the certificate, and to deny entry of ships into ports or terminals that do not have adequate facilities.

SECTION 104. VIOLATIONS

This section amends section 8 of the APPS which provides the Secretary of Transportation authority to inspect vessels of nations that are party to MARPOL while at a port or terminal of the United States. Section 104 of the bill authorizes the Secretary to inspect vessels of nations that are party to MARPOL while in the navigable waters of the United States. Other foreign vessels may be inspected in the navigable waters or the exclusive economic zone of the United States for the purpose of detecting violations of Annex V. This section also authorizes the Secretary to assess penalties for such violations under section 9 of the APPS.

SECTION 105. REFERENCE OF VIOLATION

This section amends section 9(f) of the APPS, which authorizes the Secretary of Transportation to refer a violation of the Act by a

ship registered in, or of the nationality of, a country that is a party to MARPOL to that country for appropriate action. Section 105 provides a technical and clarifying amendment to the subsection pertaining to the country to which a referral is authorized.

SECTION 106. PROPOSED AMENDMENTS TO PROTOCOL

This section amends section 10 of the APPS, which provides for acceptance of amendments to the MARPOL Protocol. These changes make technical updates of terminology and add Annex V to the section.

SECTION 107. LEGAL ACTIONS

This section amends section 11 of the APPS, which currently provides for legal actions by persons who are adversely affected against the Secretary, the Secretary of the Treasury, or any person who is alleged to be in violation of the Act. This amendment adds a new subsection (c), with old subsection (c), (d), and (e) being redesignated (d), (e), and (f) respectively. New subsection (c) authorizes a person damaged because of action taken by the Secretary while enforcing Annex V requirements to sue for any damages caused thereby.

SECTION 108. REFUSE RECORD BOOKS

This section requires the Secretary to adopt regulations requiring U.S. vessels to maintain logbooks, to develop shipboard waste management plans and to display placards outlining Annex V requirements. It further requires the Secretary to specify the vessels on which such requirements will apply. It also requires the Secretary to seek an international agreement implementing these requirements internationally. If the attempt to develop an international agreement is not successful, the Secretary is to report on the advisability of extending the requirements to all vessels within the U.S. exclusive economic zone.

SECTION 109. COMPLIANCE WITH INTERNATIONAL LAW

This section provides that any action taken pursuant to this Act shall be in accordance with international law.

SECTION 110. CIVIL PENALTY

This section establishes Class I and Class II civil penalties not to exceed $1,000 and $25,000, respectively, for violations of the APPS. In addition, up to one half of any penalty assessed may be paid as a reward to persons giving information leading to the assessment of such penalties.

SECTION 111. REFUSE ACT AMENDMENTS

This section establishes civil penalties not to exceed $25,000 for violations of section 13 of the Refuse Act (33 U.S.C. 407) which prohibits the disposal of refuse into the navigable waters of the United States from a ship or from the shore. These penalties should be assessed by the Administrator of the Environmental Protection Agency or the Secretary of the Army, as the case may be. Again,

up to one half of any penalty assessed may be paid as a reward to persons giving information leading to the assessment of such penalties.

TITLE II—STUDIES AND REPORT

SECTION 201. COMPLIANCE WITH ANNEX V GENERALLY

This section requires that within 2 years from the date of enactment of this Act, and every 2 years thereafter, for a period of 10 years, the Coast Guard, in consultation with the Department of Agriculture and the National Oceanic and Atmospheric Administration, shall report to the Congress on the compliance with Annex V in U.S. waters, including the exclusive economic zone.

SECTION 202. COMPLIANCE BY FEDERAL AGENCIES

This section requires that Federal agencies report annually to the Congress on the extent to which their vessels are in compliance with Annex V. Each agency shall submit such a report each year until all its vessels are in compliance with Annex V. This section also requires that 3 years after the date of enactment, any U.S. Federal agency that may be unable to comply with the requirements of Annex V within 5 years shall submit a report to the Congress describing the impediments to full compliance, an alternative schedule for compliance, and a description of the ships for which compliance is not technologically possible.

SECTION 203. STUDY OF METHODS TO REDUCE PLASTIC POLLUTION

This section combines and elaborates the provisions of title I of S. 559 and section 107 of S. 633. It provides that the Administrator of the Environmental Protection Agency shall conduct a study to determine methods to reduce or eliminate plastics disposal in U.S. waters. The Administrator is required to make recommendations to the Congress within 18 months of enactment of the Act as to what administrative and legislative actions might be taken to eliminate or significantly reduce plastic pollution of our waters.

The study of methods to reduce plastic pollution focuses on two related yet distinct components of the plastic waste problem: (1) plastics in the aquatic environment, especially as it affects aquatic life and contributes to the aesthetic degradation or economic losses in beach, coastal, and waterfront areas; and (2) plastics in the solid waste stream. Plastics comprise an increasing percentage of the waste that is filling landfills. Critical shortages of landfill capacity are predicted for several states within the next decade.

Under this section the Administrator of the Environmental Protection Agency is required to undertake a study describing the adverse effects that the improper disposal of plastics have on the environment, including the effects on fish and wildlife and the habitat of such species and the effects on beaches and other waterfront areas. The Administrator is required to identify the various means that are, or due to technological advances, may be available, to control or eliminate such adverse effects.

The Administrator is to include a compilation of improper disposal practices and associated specific plastic articles that occur in the

environment with sufficient frequency to cause death or injury to fish or wildlife, affect adversely the habitat of fish or wildlife, contribute significantly to aesthetic degradation or economic losses in beach, coastal or waterfront areas, endanger human health or safety, or cause other significant impacts. In compiling such a list, the Administrator should draw on existing studies, such as *The Use and Disposal of Non-Biodegradable Plastic in the Marine and Great Lakes Environment,* EPA Contract Number 68-02-4228.

The Administrator must evaluate the relative impact of plastics, as compared to other wastes, on the solid waste stream. The Administrator also shall evaluate the land-based sources of aquatic pollution, such as landfills and municipal sources, and identify whether improved enforcement of existing laws or regulations is necessary.

The Administrator shall evaluate the feasibility and desirability of substitutes for those articles identified in the list under section 203(b)(1), including comparisons between the article identified and the substitute with regard to relative environmental public health and safety, and the availability of such alternatives.

The Administrator shall include in the study an evaluation of the feasibility and, if feasible, the desirability of using recycling initiatives (including recovery of energy value), to reduce the amount of plastic articles entering the solid waste stream, including an analysis of the status of and need for public and private research and development to develop and market recycled plastics. If recycling of plastics is to become an economically viable alternative, it will be necessary to develop new uses for recycled plastics. The Administrator also shall include in the study an analysis of methods to facilitate the recycling of plastic materials by identifying methods to aid in the sorting of such different materials. One obstacle to recycling of plastics lies in the many different plastic materials in common use. The Administrator, therefore, is required to recommend methods for sorting plastic to facilitate recycling, including the desirability and feasibility of standardizing the types of plastic materials, considering protection of public health and trade secrets.

The Administrator shall include in the study an analysis of incentives, including deposits on plastic containers, to increase the supply of plastic material for recycling, and to decrease the amount of plastic debris, especially in aquatic environments.

The effect of existing tax laws on the manufacture and distribution of virgin plastic material as compared with recycled material is to be addressed by the Administrator. This part of the analysis must be conducted in consultation with the Secretary of the Treasury and the Secretary of Commerce, and should focus on whether a bias exists to favor virgin over recycled materials. The Administrator shall include in the study recommendations regarding measures, including fees or tax incentives, that can be implemented by the Federal Government or the Congress to promote the development of new uses for recycled plastic articles and measures that can be implemented to encourage manufacturers of plastic articles to consider re-use and recycling in product design.

The Administrator must make recommendations regarding a public education campaign, carried out under another section of this act, to promote any environmental and economic advantages

to recycling of plastic materials. The Administrator also is to include in the study a list of recycled plastic products which could be purchased by the Federal Government.

The Administrator shall evaluate the feasibility of making articles identified under section 203(b)(1) from degradable palstic materials, taking into account the risk to human health and the environment, the properties of the end-products of the degradation of plastic materials, including biotoxicity, potential for bioaccumulation, persistence and fate within the environment under various physical conditions.

The study of degradable plastics must address the efficiency and variability of degradation due to differing environmental and biological conditions, and the relative benefits and purpose of such article and its materials of construction, including the duration for which such article was designed to remain intact, paying particular attention to the protection of human health, technical considerations and cost considerations.

In conducting the study the Administrator must consult with the Administrator of the National Oceanic and Atmospheric Administration, the Director of the U.S. Fish and Wildlife Service, the Consumer Product Safety Commission, the Food and Drug Administration, the Coast Guard, the Navy.and all other Federal departments and agencies engaged in research, investigation, or studies involved directly or indirectly with plastic pollution.

The list compiled under section 203(b)(1) shall be submitted to the Congress within 6 months after the date of enactment of this Act, and the balance of the study shall be submitted within 18 months after the date of enactment of this Act.

SECTON 204. PUBLIC AWARENESS PROGRAM

This section is virtually identical to section 108 of S. 633. It is intended to stimulate and activate public concern about the problems of pollution of the aquatic environment. Despite general concern about pollution of the oceans and other waters, much of the public remains unaware of the specific hazards presented by plastic material disposed of in aquatic environments.

The Administrator of the Environmental Protection Agency, the Administrator of the National Oceanic and Atmospheric Administration, the Secretary of the Interior, and the Secretary of Transportation are required under this section to develop and conduct a program to educate the public about the threat presented by the disposal of plastic material and attendant penalties. As part of this effort, the agencies are explicitly required to develop and produce public service announcements detailing the harm caused by disposal of plastics in aquatic environments.

The agencies also are directed to encourage the development of "Citizen Pollution Patrols" to serve as an adjunct to governmental efforts to monitor and clean up the oceans and waterfront areas.

TITLE III—REGULATION OF PLASTIC RING CARRIERS

SECTION 301. DEFINITIONS

This section defines the terms "regulated item" and "naturally degradable material." The term "regulated item" means any plastic ring carrier device which is made, used, or designed for the purpose of packaging, transporting, or carrying multi-packaged cans or bottles, and which is of a size, shape, design or type capable, when discarded, of becoming entangled with fish or wildlife. Only plastic ring carriers are covered by this section. Not included within this definition are plastic devices that do not contain an enclosed, manufactured hole or circle of more than 1¾ inches in diameter.

The term "naturally degradable material" is defined as a material which, when discarded, will be reduced to environmentally benign sub-units under the action of normal environmental forces, such as, among others, biological decomposition, photo-degradation, and hydrolysis.

SECTION 302. REGULATION

This section of the bill requires the Administrator of the Environmental Protection Agency to require, by regulation, that plastic ring carriers be made of naturally degradable material. A final rule must be promulgated no later than 36 months after the date of the enactment of this act, unless the Administrator determines under section 203(b)(7) of this Act that it is not feasible, or that by requiring this regulation, significant harm may result to human health and/or the environment, including harm to fish and wildlife.

Plastic ring carriers should decompose in the shortest period of time consistent with the intended use of the item and the physical integrity required for such use. The regulation must allow a reasonable time for affected parties to comply with the regulation, and must allow sufficient time for affected parties to come into compliance and use existing inventories.

TITLE IV—BIGHT RESTORATION PLAN

SECTION 401. BIGHT RESTORATION PLAN

This section of the bill requires the Administrator of the Environmental Protection Agency to prepare and submit to the Congress, within 3 years after the date of enactment of this legislation, a plan to determine what types of pollution are contaminating the New York Bight and to stem this contamination and restore the area.

To coordinate the efforts of different levels of government in restoring this badly polluted area, the Administrator is required to consult with Federal, State, and intrastate agencies.

The New York-New Jersey Bight area, which encompasses over 11,000 square miles, is unique in the variety and number of waste streams that pollute the area. The long-term degradation of the Bight area, the variety of waste sources involved and the number of jurisdictions regulating use of the area make it imperative that a Federal plan be devised. The plan should identify those uses of

the ocean, such as fishing and recreation, in the New York Bight and other areas that are being affected adversely by pollutant inputs.

The Administrator is required to develop a plan that must not only identify sources of contaminants in the Bight but determine which contaminants are hazardous, what options are available to control or eliminate these sources and the costs involved in such a program. The Administrator must make recommendations for funding and coordination between Federal, State and local governments in order to implement the plan. This plan should not duplicate or supercede the Administrator's efforts under Section 320 of the National Estuary Program of the Clean Water Act.

SECTION 402. REPORTS TO CONGRESS

This section requires the Administrator of the Environmental Protection Agency to develop a detailed schedule and associated funding requirements for completing the preliminary reports required under this section and the Bight Restoration Plan required under section 401 of the bill.

Specifically, the Administrator is required to prepare five documents for the Congress. The first of these documents outlines the schedule and funding needs for the remaining three reports and the plan. The first report is a study of alternatives to sludge dumping. The second report is an assessment of contaminants polluting the Bight and their impact on the environment. The third study is an assessment of available control measures and the role of various governmental programs. The final document is the plan itself, including methods, costs and schedule for implementation.

TITLE V—RELATION TO OTHER LAW

SECTION 501. RELATION TO OTHER LAW

This section states that nothing in the Plastic Pollution Control Act of 1987 shall be interpreted or construed to supercede or preempt any other provisions of Federal or State law, either statutory or common, except as specifically provided in this Act. Additionally, nothing in this Act shall be construed or interpreted as preempting any State from imposing any additional requirements. A State, for example, is not preempted from imposing additional regulatory requirements on the manufacture or disposal of plastic articles.

HEARINGS

Three hearings were conducted before the Subcommittee on Environmental Protection on the subject of pollution from plastic debris. The hearings were held in Narragansett, Rhode Island, on June 1, 1987, in Asbury Park, New Jersey, on July 7, 1987, and in Washington, D.C. on September 17, 1987.

Testimony was received from representatives of the U.S. Coast Guard, National Marine Fisheries Service, Environmental Protection Agency, State and local agencies, environmental organizations, ports, merchant shipping, and the waste management industry.

ROLLCALL VOTES

Section 7(b) of rule XXVI of the Standing Rules of the Senate and the rules of the Committee on Environment and Public Works require that any rollcall votes taken during consideration of this bill be announced in this report.

There were no rollcall votes taken during the Committee's consideration of this bill. The bill was ordered reported on November 10, 1987, by a unanimous voice vote.

REGULATORY IMPACT

Section 11(b) of rule XXVI of the Standing Rules of the Senate require the Committee to evaluate the regulatory impact of the reported bill.

Under section 302 of the bill, the Administrator of the Environmental Protection Agency must require, by regulation, that plastic ring carriers be made of naturally degradable material, unless it is determined that it is not feasible to do so. It is not anticipated that this provision will impose any significant new regulatory burden.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires each report to contain a statement of the cost of the reported bill prepared by the Congressional Budget Office. That statement follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, December 16, 1987.

Hon. QUENTIN N. BURDICK,
Chairman, Committee on Environment and Public Works, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the attached cost estimate for the Plastic Pollution Research and Control Act of 1987.

If you wish further details on this estimate, we will be pleased to provide them.

With best wishes,

Sincerely,

EDWARD M. GRAMLICH,
Acting Director.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: Not yet assigned.
2. Bill title: Plastic Pollution Control Act of 1987.
3. Bill status: Ordered reported by the Senate Committee on Environment and Public Works, November 10, 1987.
4. Bill purpose: This bill would direct the U.S. Coast Guard (USCG) to prescribe regulations implementing Annex V to the International Convention for Prevention of Pollution from Ships, 1973. The bill would amend the Act to Prevent Pollution from Ships to incorporate the requirements of the Annex for all vessels operating in U.S. waters. Government vessels engaged in non-com-

mercial activities would be allowed five years to achieve compliance. In addition, Section 103 of the bill would require persons in charge of ports and terminals to provide or ensure the availability of garbage reception facilities in accordance with regulations to be issued by the USCG.

Section 203 would require the Environmental Protection Agency (EPA) to conduct a comprehensive study of plastic pollution issues, including: (1) compilation of improper disposal practices, (2) an investigation of the adverse impacts of plastic pollution on the environment, (3) feasibility studies on substitute or biodegradable materials, recycling, and new procurement practices, and (4) basic research on plastic pollution in the solid waste stream.

Within 36 months of the bill's enactment, Title III would direct the EPA to require (if feasible) items such as plastic ring carriers to be naturally degradable.

Title IV would require the EPA to develop and report on a comprehensive restoration plan for the New York Bight. For this purpose, the bill would authorize the appropriation of $3 million over fiscal years 1988-1990. The final plan would have to be submitted to the Congress within three years of the bill's enactment.

Finally, the bill would direct the EPA, the Department of Commerce (DOC) and the USCG to conduct various studies and public education activities and report to the Congress on their results.

5. Estimated cost to the Federal Government:

[By fiscal year, in millions of dollars]

	1988	1989	1990	1991	1992
Estimated Authorization Level	16.1	1.0	0.4		
Estimated Outlays	8.7	6.9	1.8	0.1	

The costs of this bill fall within budget functions 300 and 400.

Basis of Estimate: For purposes of this estimate, it is assumed that the bill will be enacted by February 1, 1988 and that Annex V will become effective by the following fiscal year. Where unspecified, authorization levels have been estimated on the basis of information provided by the U.S. Coast Guard and the EPA. The full amounts authorized or estimated to be required are assumed to be appropriated for each fiscal year.

In fiscal year 1988, the authorization level includes $3 million provided for the New York Bight Restoration Plan under Title IV and another $11.6 million estimated to be necessary for the plastic pollution study mandated by Title II. The remaining $1.5 million would fund USCG regulatory activities required under Title I and the Section 204 public awareness program. Because many of the required activities under Section 204 are currently being carried out by the Department of Commerce under current law, CBO estimates that additional costs would not exceed $1 million.

Estimated fiscal year 1988 outlays are mostly attributable to activities carried out under Section 203 ($7 million) and reflect the assumption that the EPA will be able to meet the specified 18-month deadline. It is possible that the agency would be unable to complete its efforts on time; if so, 1988 outlays would be lower and

Section 203 costs would be spread over a longer period. Other fiscal year 1988 spending would support the Bight restoration plan ($1 million) and other activities under Titles I and II of the bill ($0.7 million).

For each of fiscal years 1989 and 1990, estimated appropriations of about $0.25 million have been included for ongoing Coast Guard activities under Title I. In addition, assuming the use of naturally degradable substitutes for certain plastic devices is deemed to be feasible under Title II, the EPA would need additional funding of about $0.8 million in fiscal year 1989 and $0.1 million in 1990 in order to promulgate regulations to implement the requirements of Title III. This activity would increase outlays by about $0.6 million in 1989 and by about $0.2 million in 1990.

Finally, additional costs may be incurred by the U.S. Navy and othe federal agencies that must comply with Annex V, but these costs have not been estimated. While Navy policy assumes eventual compliance with the terms of the Annex, the length of time anticipated to be necessary for implementation has been estimated at 15 years. Accelerating the compliance program will most likely increase costs, but the magnitude of such increases would depend on how much abatement can be accomplished by future changes in procurement and operating procedures. Navy efforts to evaluate compliance costs have not been completed at this time. Other agencies such as the USCG are already complying with the Annex, and, for other agencies, the cost to do so is not expected to be significant.

6. Estimated cost to State and local governments: After Annex V becomes effective, the bill would require all port or terminal operators to ensure the availability of garbage reception facilities in accordance with USCG regulations. The potenital costs of this provision depend greatly on the nature of the regulations that the USCG would promulgate, particularly as to how many ports would have to expand their existing facilities. In most cases, the costs are not likely to be substantial.

7. Estimate comparison: None.

8. Previous CBO estimate: On September 30, 1987, CBO prepared a cost estimate for H.R. 940, the Plastic Pollution Research and Control Act of 1987, as ordered reported by the House Committee on Merchant Marine and Fisheries, September 22, 1987. The estimated costs of H.R. 940 are lower because the requirements in that bill for the plastic pollution study, New York Bight restoration plan, and public awareness program are less extensive than those in the Senate Environment and Public Works Committee version.

On December 15, 1987, CBO also prepared an estimate for H.R. 940, the Marine Plastic Pollution Prevention Act of 1987, as ordered reported by the Senate Committee on Commerce, Science, and Transportation, November 19, 1987. The costs of that version of the bill are lower, because it does not contain requirements for the plastic pollution study, the New York Bight restoration plan, or the regulation of plastic ring containers, and it requires a less comprehensive public awareness program.

9. Estimate prepared by: Deborah Reis.

10. Estimate approved by: C.G. Nuckols (for James L. Blum, Assistant Director for Budget Analysis).

CHANGES IN EXISTING LAW

In the opinion of the Committee, it is necessary to dispense with the requirements of section 12 of rule XXVI of the Standing Rules of the Senate in order to expedite the business of the Senate.

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